

REMARKS

Applicants respectfully traverse and request reconsideration.

Applicants wish to thank the Examiner for the notice that claims 2-13, 22 and 23 are allowed.

Claim 18 is objected to and the amendment is believed to overcome the claim objection.

Claims 14-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Cheney et al. in view of So. Claim 14 is directed to a method that includes, among other things, receiving a compressed transport stream associated with a digital video broadcast signal and generating a secondary set of control signals from the compressed transport streams control signals and storing at least a portion of the compressed transport stream data signals via a first bus in a frame buffer controlled by the secondary set of control signals wherein the frame buffer stores uncompressed data in a different mode of operation. Among other advantages, a graphics memory or frame buffer used by a graphics engine, for example, is also used in a different mode to buffer a compressed transport stream such as an MPEG-2 transport stream. (See for example, Specification, page 5, lines 17-22). Among other differences, Cheney teaches a system that employs frame buffers that store decoded video data in a full frame format or a combination of a decoded full frame format and a scaled video format for output to a display (see for example, column 9, lines 26-31). Other distinctions will be recognized by those of ordinary skill in the art. Applicants also respectfully reassert relevant remarks made in the prior response. Accordingly, the claim is believed to be in condition for allowance.

As to claim 15, Applicants respectfully reassert the relevant remarks made in the prior response and respectfully submit that the claim is allowable at least as depending from an allowable base claim.

New claim 24 is also believed to be allowable since the cited references do not appear to teach or suggest secondary sets of control signals from the compressed transport stream control signals of the types as claimed.

The other dependent claims add additional novel and non-obvious subject matter.

Claims 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schindler in view of So. As a preliminary matter, the office action, on page 12 with respect to rejecting claims 18-20, refers to the Cheney et al. reference. Applicants believe this is a typographical error and as such, will treat it as such. However, if the rejection is based on Cheney, Applicants respectfully request a new office action.

The office action admits that the Schindler reference fails to teach, among other things, a video graphics adapter having a transport stream port to receive compressed transport stream and another transport stream. The office action also admits that the Schindler reference teaches a digital video broadcast signal as transmitted through the PCI bus 312. Applicants respectfully note that the claim requires, among other things, that the video graphics adapter includes both a transport stream port that receives multiple transport streams and also includes a bus interface port coupleable to a central processing unit and further includes a graphics engine and a video output port. There does not appear to be any cite to any reference that teaches such a video graphics adapter that includes a graphics engine and multiple ports as claimed. In fact, it appears to be admitted that neither the Schindler reference nor the So reference teach such a structure. The So reference has been cited as allegedly teaching a video graphics adapter that has a transport stream port to receive the compressed transport stream and another transport stream and also includes a graphics engine and video output port as Schindler has not been cited as teaching this subject matter. The office action alleges that this language is met by the

Northbridge chip 108. However, the Northbridge chip does not have a graphics engine nor does it include a video output as required by the claim and as such does not qualify as a video graphics adapter. Since the cited reference does not teach the claimed subject matter, Applicants respectfully submit that the claim is in condition for allowance.

In addition, Applicants respectfully submit that even combining the alleged teaching of the references as suggested by the office action, would not result in Applicants' claimed invention. For example, the office action states that the combination of the method of receiving video graphics data as disclosed by Schindler with the teaching of So which discloses using "a Northbridge integrated interface for multiple buses in conjunction with the frame buffer memory in a system or PCI bus" would provide advantages of reducing hardware components, simplify the system and bypass the PCI bus which would cut manufacturing costs and improve processing speed as shown by the So reference. However, Applicants respectfully submit that the combination of the references requires the addition of the Northbridge chip 108 which actually increases the cost of the system and requires an additional integrated circuit.

So also teaches away from the combination since the video graphics blocks described do not have the transport stream ports that receive compressed transport stream and another transport stream as well as a bus interface port as claimed but appears to use a conventional video graphics structure. Accordingly, this claim is also in condition for allowance.

As to claim 19, the claim requires, among other things, graphics memory operatively coupled to the graphics engine the transport stream port and the bus interface port to store at least a portion of the compressed transport stream and is coupled to store data for the graphics engine as well. The office action cites to the DRAM 514 in Schindler which in fact is a dedicated piece of RAM for the decoder as shown and as stated for example, in column 11, line 38. The DRAM

514 is not a graphics memory that stores either a compressed transport stream or data for a graphics engine nor is it coupled to a bus interface port as required by the claim. Accordingly, the claim is in condition for allowance. The office action also fails to provide any other reference and any teaching that teaches a graphics memory that stores either data for a graphics engine or stores a compressed transport stream that is coupled to a transport stream port and to a bus interface port as claimed. In fact, the reference to this So reference refers to internal memory 128 but the office action is silent as to why a combination of internal memory 128 and dedicated decoder DRAM 514 of Schindler renders the claim unpatentable. In any event, the claim structure is not taught in the cited reference. Accordingly, this claim is also in condition for allowance.

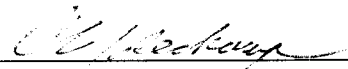
Claim 20 is also allowable as at least depending from an allowable base claim.

Claim 21 has been amended and requires, among other things, storing pixel information in a frame buffer of a video graphics adapter wherein one line of frame buffer memory is representative of one line of video image to be displayed and in the second mode of operation stores compressed transport stream data wherein one line of the frame buffer memory is representative of one transport stream packet. In the “Response to Arguments” section, the Examiner refers Applicants to column 11, lines 34-52 of the Schindler reference and states that the controller 510 places video information into dynamic access memory or video memory 518. However, Applicants respectfully note that the cited portion actually refers to decoded video data being placed by the controller into VRAM 518 and does not teach or suggest a frame buffer that stores either compressed data from a transport stream or uncompressed pixel data for display depending on a mode of operation. The office action appears to also admit that Maladi also fails to teach such a structure and refers to Datari to provide an advantage of “improved priority

accessing” of transport stream packets. However, Applicants respectfully submit that such motivation is not relevant since Applicants’ claim does not claim “improved priority accessing” and claims different modes of operation so that there is no need for priority accessing of compressed or uncompressed information since, in one mode, compressed information is stored and in another mode, pixel information is stored in the frame buffer. Accordingly, claim 21 is in condition for allowance.

Applicants respectfully submit that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

By: 
Christopher J. Reckamp
Registration No. 34,414

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Vedder, Price, Kaufman & Kammholz, P.C.
222 North LaSalle Street
Chicago, IL 60601
(312) 609-7500
FAX: (312) 609-5005